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RIES, LAURIE ANNE				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/483,317

Applicant(s)

LIN, BO-IN

Examiner

LAURIE RIES

Art Unit

2176

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 April 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No./Mail Date: _____

DETAILED ACTION

1. This action is responsive to communications: Request for Continued Examination, filed 5 April 2010, to the Original Application, filed 14 January 2000.
2. Claims 1-21 are pending. Claims 1, 7, 13, and 19 are independent claims.

Request for Continued Examination

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5 April 2010 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 1, 7, 13, and 19, as amended in the Request for Continued Examination filed on 5 April 2010, contain the newly added limitation of a "unique alpha-numeral designation specific to the graphic element designating a naming term and described in said textual descriptions..." Additionally, claim 19, as amended in the Request for Continued Examination filed on 5 April 2010, contains the newly added limitation of "said naming term immediately and directly next to said graphic element assigned by said unique graphic element designation the same as the alpha-numeral designation of said unique naming term described in said textual descriptions..."

Claim Rejections -- 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rivette, et al. (U.S. Patent 5,991,780, with priority to November 19, 1993) [hereinafter "Rivette"], in view of Krause, et al. (U.S. Patent 5,625,827, filed December 23, 1994) [hereinafter "Krause"], and further in view of Applicant's specification [hereinafter "specification"].**

Regarding independent claim 1, Rivette in view of Krause and further in view of specification teaches:

A naming-term based and graphically aided document management and review processing system implemented in a computer comprising: a document reading processing module for reading a single document having textual descriptions and at least a drawing having at least a graphic element assigned and illustrated with an alpha-numeral designation and described with said alpha-numeral designation designating a descriptive naming term in said textual descriptions, wherein said document reading

processing module is further provided for converting said graphic element assigned with said alphanumerical-designation and said textual descriptions to a plurality of processor-recognized elements and incorporating the textual descriptions and the number of processor-recognized elements in a single processor-recognizable file;;

a search and link processing module for searching within said single processor-recognizable file for linking said processor-recognized with said alpha-numeral designation with at least one associated segment of said textual descriptions including and describing said descriptive naming term designated by said alpha-numeral; and

a display processing module for displaying said drawing with said naming-term as designated by said alpha-numeral designation and described in said at least one associated segment of said textual description wherein said name term is displayed immediately and directly next to said graphic element illustrated with said alpha-numeral designation assigned to said graphic element whereby a document reviewer can directly and graphically view and associate said graphic element together with said naming term described in said textual descriptions.

(See, Rivette, teaching a document reading means for reading a document having textual descriptions and at least a drawing having at least a graphic element assigned with an alpha-numeral designation, wherein said document reading means is further provided for converting said graphic element with said alphanumerical-designation and

said textual descriptions to a plurality of processor-recognized elements in fig. 9 and 10. Fig. 9 demonstrates how the documents arrive in electronic format from the Patent and Trademark Office and then in fig. 10 displays the process of converting the documents into process-recognized elements.

Rivette also teaches a search and link means for searching said processor-recognized elements and linking alpha-numeral designations with at least one associated segment of textual description including the alpha-numeral designation wherein the alpha-numeral designation linked to a descriptive naming term in the document in fig. 35 and 36, col. 3 lines 28-51, and col. 29 line 65 – col. 30 line 20. Rivette describes how the text and image files are synchronized to produce Equivalent Files. The files are the equivalent of the elements and synchronized is the equivalent of linking in the claimed invention. Applicant's specification in page 3 lines 6-9 further discloses that products for searching and linking text to graphic elements are commonly available in the market.

While Rivette does not teach expressly that the textual descriptions include describing said descriptive naming term designated by said alpha-numeral designation, Krause teaches textual descriptions included in a secondary document that describes said descriptive naming term, such as describing the descriptive naming term which is designated by said alpha numeral designation "A" (See Krause, Figure 5, element 65). Furthermore, it would have been obvious to do so, providing the benefit of allowing the user to obtain additional information with regard to the descriptive naming term that may not be conveniently displayed on the initial display screen.

Rivette teaches the display of both graphics and associated text including the column and line numbers of said text on the screen immediately next to one another in both fig. 33, col. 3 line 66 to col. 4 line 5, and col. 4 lines 19-24. Fig. 33 shows and col. 4 lines 19-24 explains a patent image window immediately next to a window of associated text. What Rivette does not teach is each descriptive naming-term displayed immediately next to the graphic elements and the alpha-numeral designation assigned to each graphic element whereby a user can select an alpha-numeral designation or a descriptive naming term to display of the associated segment of textual description associated with said alpha-numeral designation or descriptive naming term.

Krause teaches each descriptive naming-term displayed immediately and directly next to the graphic elements in fig. 3-5 and col. 5 lines 7-18. See specifically Krause, Figure 5, showing a descriptive naming term, such as "building paper", for example, displayed immediately and directly next to said graphic element. The graphic elements and the text labels and text descriptions are all readily available to the user on one screen. Krause teaches in col. 5 lines 7-13 that both a name and label are placed upon the graphic at each of a plurality of hotspots. Furthermore, Krause teaches in fig. 3b that each hotspot has unique coordinates to uniquely identify each hotspot and consequently each graphic element identified by each hotspot is likewise uniquely identified by individual coordinates related to the location of the hotspot. Krause teaches in col. 5 lines 14-18 that a user may select, using a mouse or keyboard, said hotspot to display an associated segment of textual description. Krause teaches that the hotspots annotate a primary document and link to a textual description in a

secondary document. These documents could be document parts for example in a hierarchical compound document and thus the textual description invoked by the hotspot could be part of the same document as the graphical document containing the hotspot. Additionally Krause teaches that the descriptive naming term may be described in at least one associated segment of a textual description also displayed immediately and directly next to said graphic element (See Krause, Figure 6, showing descriptive naming term "1/A34" displayed with textual description "Soffit Section" immediately and directly next to a graphic element of a soffit section).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Rivette with Krause and teachings of Applicant's disclosure to have created the claimed invention. One of ordinary skill in the art would have taken the text of Rivette and used it to replace the numbered labels on the images, as is done in Krause, through the use of automatic link generation systems and techniques which Applicant's specification teaches were readily available in the market. It would have been obvious and desirable to make this modification such that the combined image and text information would have been easier to read.

As disclosed, a "naming term" is the element name which is identified by number in a patent drawing. See, disclosure, figure 4B, and page 8, lines 2-4 and 15-17. There are two specifications to the term "naming term" as used in the claims. Using claim 1 as an exemplar of the independent claims, the first use of "naming term" is within the specification of the search and link means for associating a "alpha-numeral designation" with "textual descriptions" "wherein said alpha-numeral designation designating a

naming term illustrated by said graphic element. See, claim 1. The first specification does not require search by the descriptive naming term. A descriptive naming term is merely what is designated by the alpha-numeral that is searched for. The first specification is expressly taught in Rivette, figure 36, element 502, and col. 29, line 65 through col. 30, line 29, teaching the element number search.

The second specification for a "naming term" is found in claim 1 in the last section which specifies a display means "for displaying said drawing with said descriptive naming term displayed immediately next to said graphic element illustrated with said alpha-numeral designation assigned to said graphic element whereby a document reviewer can directly and graphically view and associate said graphic element together with said descriptive naming term." See Claim 1. This limitation is read by the Examiner as having been intended by the Applicant to mean that a graphic element, for example a bolt in the drawing of a mechanical device, is displayed next to the element number, for example "12," along with the "naming element," such as "bolt 12" with "bolt 12" appearing on the drawing rather than the usual designation of just "12."

It is noted that in the example immediately above, "bolt" is the same thing as "12." Displaying one or the other in association with a graphic fully identifies the graphic. Associating both the name "bolt" and the number "12" in association with the graphic is more informative, but essentially duplicative. This relationship is noted in support of the conclusion that it would have been obvious to one of ordinary skill in the art at the time of the invention to identify a graphic by either the name or the number or

both. The motivation for using both is for convenience is not having to look up the name associated with the number, or the number associated with the name. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the invention of Rivette, according to the teachings of Krause to display both a name and a number for a graphic item, as is specified in claim 1.)

While Rivette and Krause do not teach expressly incorporating the textual descriptions and the number of processor-recognized elements in a single processor-recognizable file, it was well known in the art at the time of the invention that various data may be combined into a single processor-recognizable file. At the time of the invention it would have been obvious to one of ordinary skill in the art to include the textual descriptions and processor-recognizable elements of Rivette and Krause in a single file without changing the respective function of the references and yielding the predictable result of storing both the textual descriptions and the processor-recognizable elements. Furthermore, it would have been obvious to do so, providing the benefit of allowing the textual descriptions to be stored with the processor-recognizable elements, thus making future updates more easily manageable by allowing the developer to access only a single file requiring updates rather than multiple files.

Regarding dependent claim 2, Rivette teaches:

The document management and review system of claim 1 wherein:

said search and link processing module for searching and linking said associated segment of textual description including and describing said alpha-numeral designation assigned to said graphic element further includes a document-location-finder processing module for locating a column number, a page number, and a line-range number for said associated segment of textual description in said single document; and said display processing module is further provided for displaying said column number, said page number, and said line-range number for said segment of textual description next to said alpha-numeral- designation with said naming term described in said textual descriptions displayed immediately and directly next to said graphic element.

(See, Rivette, teaching a document-location-finder from a search in col. 4 lines 24-34 and a column and line coordinates described in col. 16 lines 7-24. Rivette also teaches a display means for displaying the text which contains the original column and line information described in fig. 35 and 36, col. 2 lines 42-50, and col. 29 line 65 – col. 30 line 20. Rivette does not teach displaying this information next to the alpha-numeral-designation, descriptive naming term, and associated graphic element. Krause teaches displaying associated text immediately next to a graphic element identified by an alpha-number-designation and descriptive naming term in fig. 3-5 and col. 5 lines 7-18. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Rivette with Krause such that it displays the location information of the text in the same manner as the claimed invention. Rivette is used for viewing

patents and is fully aware of column number, page number, and line-range information of textual segments and can provide this information to the user. This information would have been displayed next to the appropriate graphic element using the teaching of Krause.)

Regarding dependent claim 3, Rivette teaches:

The document management and review system of claim 1 further comprising:

a user interface provided for allowing a user to input a user- selected naming-term to invoke said search and link processing module for searching within said single processor-recognizable file incorporating said single document for said user-selected naming-term to an associated segment of textual description including and describing said user selected naming term designated with an alpha-numeral designation linking said user-selected descriptive naming-term to an associated graphic element in said document and for displaying said associated segment of textual description immediately and directly next to art said associated graphic element whereby said document reviewer can directly and graphically view and associate said associated graphic element with said user selected naming-term simultaneously.

(See, Rivette, teaching a graphical user interface in col. 3 lines 49-51 and a text search in col. 4 lines 24-34. Rivette depicts this search in fig. 46. A search will obviously generate a report to display the results to the user after the search has completed. Rivette does not teach displaying the resulting of the search next to an associated graphic element related to the user selected naming-term. Krause does teach displaying text next to an associated graphic element assigned with a descriptive naming term related to a user selected naming-term. Krause teaches in col. 5 lines 14-18 that a user may select, using a mouse or keyboard, a hotspot or naming-term to display an associated segment of textual description. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Rivette with the teaching of Krause so that the result of the search would have displayed next to the associated graphic element related to the user selected naming-term. It would have been obvious and desirable to have done this so that the text and graphic element could have been viewed simultaneously.)

Regarding dependent claim 4, Rivette teaches:

*The document management and review system implemented in the computer of claim 1 further comprising:
a database for said single processor-recognizable file incorporating said single document for listing said alpha-numeral designation with said naming term and said at least one associated segment of said textual descriptions wherein said at least one associated segment of said textual*

descriptions includes and describes said descriptive naming term designated by said alpha-numeral designation with said alpha-numeral designation and illustrated in a graphic element in said drawing.

(See, Rivette, teaching a user interface in col. 3 lines 49-51 and search and link in col. 4 lines 24-34. Rivette teaches the display of a graphic element linked with an associated text segment in col. 3 line 66 to col. 4 line 3. Rivette depicts this search in fig. 46. A search will obviously generate a report to display the results to the user after the search has completed. Rivette does not teach displaying the resulting of the search next to an associated graphic element related to the user selected descriptive naming-term. Krause does teach displaying text including a descriptive naming term related to the user selected naming term next to an associated graphic element illustrated in the graphic element in the drawing. Krause teaches in col. 5 lines 14-18 that a user may select, using a mouse or keyboard, a hotspot or naming-term to display an associated segment of textual description. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Rivette with the teaching of Krause so that the result of the search would have displayed next to the associated graphic element related to the user selected naming-term. It would have been obvious and desirable to have done this so that the text and graphic element could have been viewed simultaneously.)

Regarding dependent claim 5, Rivette teaches:

The document management and review system implemented in the computer of claim 2 further comprising:

a user interface provided for allowing a user to input a user-selected naming-term to invoke said search and link processing module for searching within said single processor-recognizable file incorporating said single document for said user-selected naming-term and for linking said user-selected naming-term to an associated segment of textual description including and describing said naming term related to said user selected naming term wherein said naming term is designated with an alpha-numeral designation linking to an associated graphic element for displaying said associated segment of textual description and a column; or a page number, and a line-range number, in said single document, for said associated segment of textual description and at least a figure number of said associated graphic element.

(See, Rivette, teaching a user interface for searching and linking and also displaying the location of a found text in col. 3 lines 49-51, col. 3 line 66 through col. 4 line 3, and in col. 4 lines 24-34. Rivette depicts this search in fig. 46. A search will obviously generate a report to display the results to the user after the search has completed. Rivette is used for viewing patents and is fully aware of column number, page number, and line-range information of textual segments and can provide this information to the user. Rivette does not teach displaying the resulting of the search next to an associated graphic element related to the user selected naming-term. Krause does teach

displaying text and a descriptive naming term related to a user selected descriptive naming term next to an associated graphic element related to a user selected descriptive naming-term. Krause teaches in col. 5 lines 14-18 that a user may select, using a mouse or keyboard, a hotspot or naming-term to display an associated segment of textual description. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Rivette with the teaching of Krause so that the result of the search would have displayed next to the associated graphic element related to the user selected descriptive naming-term. It would have been obvious and desirable to have done this so that the text and graphic element could have been viewed simultaneously.)

Regarding dependent claim 6, Rivette teaches:

*The document management and review system implemented in the computer of claim 2 further comprising:
a user interface provided for allowing a user to input a user- selected alpha-numeral designation to invoke said search and link processing module for searching within said single processor-recognizable file incorporating said single document for said user-selected alpha-numeral designation and for linking said user-selected alpha-numeral designation to an associated segment of textual description including and describing said naming term designated by said user-selected alpha-numeral in said document; and*

said display processing module is further provided for displaying at least a drawing having a graphic element linked by said user-selected alpha-numeral designation for displaying with said naming term associated with said user-selected alpha-numeral designation immediately next to said graphic element whereby said document reviewer can directly and graphically view said drawing with said user selected alpha-numeral designation simultaneously with said naming term described in said textual descriptions disposed immediately and directly next to said graphic element.

(See, Rivette, teaching a user interface for searching and linking a naming-term to associated text in col. 3 lines 49-51, col. 3 line 66 through col. 4 line 3, and col. 4 lines 24-34. Rivette also teaches a display for drawing a graphic element, its associated text, linked naming-term and said term's location in col. 2 lines 42-50 and col. 16 lines 7-24. Rivette does not teach displaying an alpha-numeral designation and descriptive naming term next to an associated graphic element. Krause does teach displaying a name, label, and text immediately next to an associated graphic element related to a user selected naming-term. Krause teaches in col. 5 lines 14-18 that a user may select, using a mouse or keyboard, a hotspot or descriptive naming-term to display an associated segment of textual description. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Rivette with the teaching of Krause so that the name, label, and text segment would have been displayed next to the associated graphic element related to the user selected naming-

term. It would have been obvious and desirable to have done this so that the text and graphic element could have been viewed simultaneously.)

Regarding independent claim 7, Rivette teaches:

A method of naming-term based and graphically aided document review and management comprising:

- a) employing a document reading processing module for reading a single document having textual descriptions and at least a drawing having graphic element marked with an alpha-numeral designation;*
- b) converting said document including said graphic elements and said alpha-numeral-designation to a plurality of processor- recognized elements and incorporating said textual descriptions and said plurality of processor-recognizable elements into a single processor-recognizable file;*
- c) employing a search and link processing module for searching within said single processor-recognizable file for said processor- recognized elements and linking each of said alpha-numeral designation with at least one associated segment of textual description including and describing said descriptive naming term designated by said alpha-numeral in said at least one associated segment of textual description; and*
- d) displaying said drawing with said naming-term as designated by said alpha-numeral designation and described in said at least one associated alpha-numeral designation and described in said at least one associated*

segment of said textual description wherein said descriptive name term is displayed immediately and directly next to said graphic element marked by said alpha-numeral designation whereby a document reviewer can directly and graphically view and associate said graphic element together with said naming term as described in said textual descriptions.

(See, Rivette, teaching a document reading means for reading a document having textual descriptions and at least a drawing having at least a graphic element assigned with an alpha-numeral designation, wherein said document reading means is further provided for converting said graphic element with said alphanumerical-designation and said textual descriptions to a plurality of processor-recognized elements in fig. 9 and 10. Fig. 9 demonstrates how the documents arrive in electronic format from the Patent and Trademark Office and then in fig. 10 displays the process of converting the documents into process-recognized elements.

Rivette also teaches a search and link means for searching said processor-recognized elements and linking alpha-numeral designations with at least one associated segment of textual description including the alpha-numeral designation wherein the alpha-numeral designation linked to a descriptive naming term in the document in fig. 35 and 36, col. 3 lines 28-51, and col. 29 line 65 – col. 30 line 20. Rivette describes how the text and image files are synchronized to produce Equivalent Files. The files are the equivalent of the elements and synchronized is the equivalent of linking in the claimed invention. Applicant's specification in page 3 lines 6-9 further

discloses that products for searching and linking text to graphic elements are commonly available in the market.

Rivette teaches the display of both graphics and associated text including the column and line numbers of said text on the screen immediately next to one another in both fig. 33, col. 3 line 66 to col. 4 line 5, and col. 4 lines 19-24. Fig. 33 shows and col. 4 lines 19-24 explains a patent image window immediately next to a window of associated text. What Rivette does not teach is each naming-term displayed immediately next to the graphic elements and the alpha-numeral designation assigned to each graphic element whereby a user can select an alpha-numeral designation or a descriptive naming term to display of the associated segment of textual description associated with said alpha-numeral designation or descriptive naming term.

Krause teaches each descriptive naming-term displayed immediately and directly next to the graphic elements in fig. 3-5 and col. 5 lines 7-18. See specifically Krause, Figure 5, showing a descriptive naming term, such as "building paper", for example, displayed immediately and directly next to said graphic element. The graphic elements and the text labels and text descriptions are all readily available to the user on one screen. Krause teaches in col. 5 lines 7-13 that both a name and label are placed upon the graphic at each of a plurality of hotspots. Furthermore, Krause teaches in fig. 3b that each hotspot has unique coordinates to uniquely identify each hotspot and consequently each graphic element identified by each hotspot is likewise uniquely identified by individual coordinates related to the location of the hotspot. Krause teaches in col. 5 lines 14-18 that a user may select, using a mouse or keyboard, said

hotspot to display an associated segment of textual description. Krause teaches that the hotspots annotate a primary document and link to a textual description in a secondary document. These documents could be document parts for example in a hierarchical compound document and thus the textual description invoked by the hotspot could be part of the same document as the graphical document containing the hotspot. Additionally Krause teaches that the descriptive naming term may be described in at least one associated segment of a textual description also displayed immediately and directly next to said graphic element (See Krause, Figure 6, showing descriptive naming term "1/A34" displayed with textual description "Soffit Section" immediately and directly next to a graphic element of a soffit section).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Rivette with Krause and teachings of Applicant's disclosure to have created the claimed invention. One of ordinary skill in the art would have taken the text of Rivette and used it to replace the numbered labels on the images, as is done in Krause, through the use of automatic link generation systems and techniques which Applicant's specification teaches were readily available in the market. It would have been obvious and desirable to make this modification such that the combined image and text information would have been easier to read.

While Rivette does not teach expressly that the textual descriptions include describing said descriptive naming term designated by said alpha-numeral designation, Krause teaches textual descriptions included in a secondary document that describes said descriptive naming term, such as describing the descriptive naming term which is

designated by said alpha numeral designation "A" (See Krause, Figure 5, element 65). Furthermore, it would have been obvious to do so, providing the benefit of allowing the user to obtain additional information with regard to the descriptive naming term that may not be conveniently displayed on the initial display screen.

As disclosed, a "naming term" is the element name which is identified by number in a patent drawing. See, disclosure, figure 4B, and page 8, lines 2-4 and 15-17. There are two specifications to the term "naming term" as used in the claims. Using claim 1 as an exemplar of the independent claims, the first use of "naming term" is within the specification of the search and link means for associating a "alpha-numeral designation" with "textual descriptions" "wherein said alpha-numeral designation designating a descriptive naming term illustrated by said graphic element. See, claim 1. The first specification does not require search by the descriptive naming term. A descriptive naming term is merely what is designated by the alpha-numeral that is searched for. The first specification is expressly taught in Rivette, figure 36, element 502, and col. 29, line 65 through col. 30, line 29, teaching the element number search.

The second specification for a "naming term" is found in claim 1 in the last section which specifies a display means "for displaying said drawing with said descriptive naming term displayed immediately next to said graphic element illustrated with said alpha-numeral designation assigned to said graphic element whereby a document reviewer can directly and graphically view and associate said graphic element together with said descriptive naming term." See Claim 1. This limitation is read by the Examiner as having been intended by the Applicant to mean that a graphic

element, for example a bolt in the drawing of a mechanical device, is displayed next to the element number, for example "12," along with the "naming element," such as "bolt 12" with "bolt 12" appearing on the drawing rather than the usual designation of just "12."

It is noted that in the example immediately above, "bolt" is the same thing as "12." Displaying one or the other in association with a graphic fully identifies the graphic. Associating both the name "bolt" and the number "12" in association with the graphic is more informative, but essentially duplicative. This relationship is noted in support of the conclusion that it would have been obvious to one of ordinary skill in the art at the time of the invention to identify a graphic by either the name or the number or both. The motivation for using both is for convenience is not having to look up the name associated with the number, or the number associated with the name. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the invention of Rivette, according to the teachings of Krause to display both a name and a number for a graphic item, as is specified in claim 7.)

While Rivette and Krause do not teach expressly incorporating the textual descriptions and the number of processor-recognized elements in a single processor-recognizable file, it was well known in the art at the time of the invention that various data may be combined into a single processor-recognizable file. At the time of the invention it would have been obvious to one of ordinary skill in the art to include the textual descriptions and processor-recognizable elements of Rivette and Krause in a single file without changing the respective function of the references and yielding the

predictable result of storing both the textual descriptions and the processor-recognizable elements. Furthermore, it would have been obvious to do so, providing the benefit of allowing the textual descriptions to be stored with the processor-recognizable elements, thus making future updates more easily manageable by allowing the developer to access only a single file requiring updates rather than multiple files.

Regarding dependent claim 8, Rivette teaches:

*The method of document management of claim 7 wherein:
said step c) further includes a step of employing a document- location-
finder processing module for locating a column or page number, and a
line-range number in said single document for said at least one associated
segment of textual description; and
said step d) of displaying said naming term described in said textual
descriptions immediately and directly next to said graphic elements further
displaying said column or page number, and said line-range number in
said single document for said segment of textual description for said
graphic elements each displayed immediately and directly adjacent said
descriptive naming term as described in said textual descriptions.*

(See, Rivette, teaching a document-location-finder from a search in col. 4 lines 24-34 and a column and line coordinates described in col. 16 lines 7-24. Rivette also teaches

a display means for displaying the text which contains the original column and line information described in col. 2 lines 42-50. Rivette does not teach displaying this information next to the alpha-numeral-designation, descriptive naming term, and associated graphic element. Krause teaches displaying associated text next to a graphic element identified by an alpha-number-designation and descriptive naming term in fig. 3-5 and col. 5 lines 7-18. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Rivette with Krause such that it displays the location information of the text in the same manner as the claimed invention. Rivette is used for viewing patents and is fully aware of column number, page number, and line-range information of textual segments and can provide this information to the user. This information would have been displayed next to the appropriate graphic element using the teaching of Krause.)

Regarding dependent claim 9, Rivette teaches:

The method of document management of claim 7 further comprising:

e) employing a user interface for allowing a user to input a user- selected naming-term to invoke said search and link processing module for searching within said single processor-recognizable file incorporating said single document for said user-selected descriptive naming-term and for linking said user-selected naming-term to an associated segment of textual description in said document that includes and describes said user selected naming term designated with an alpha- numeral designation

linking to an associated graphic element for displaying said associated segment of textual description including said user selected naming term immediately and directly next to said associated graphic element.

(See, Rivette, teaching a graphical user interface in col. 3 lines 49-51 and a text search in col. 4 lines 24-34. Rivette depicts this search in fig. 46. A search will obviously generate a report to display the results to the user after the search has completed. Rivette does not teach displaying the resulting of the search next to an associated graphic element related to the user selected naming-term. Krause does teach displaying text including a user selected descriptive naming term next to an associated graphic element related to a user selected naming-term. Krause teaches in col. 5 lines 14-18 that a user may select, using a mouse or keyboard, a hotspot or naming-term to display an associated segment of textual description. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Rivette with the teaching of Krause so that the result of the search would have displayed next to the associated graphic element related to the user selected descriptive naming-term. It would have been obvious and desirable to have done this so that the text and graphic element could have been viewed simultaneously.)

Regarding dependent claim 10, Rivette teaches:

*The method of document management of claim 7 further comprising:
incorporating said alpha-numeral designation with said naming term
described in said textual descriptions and said at least one associated*

segment of said textual descriptions in a database wherein said naming term described in said textual descriptions is linked to said at least one associated segment of textual description includes and describes said descriptive naming term designated by said alpha-numeral designation with said alpha-numeral designation.

(See, Rivette, teaching a user interface in col. 3 lines 49-51 and search and link in col. 4 lines 24-34. Rivette teaches the display of a graphic element linked with an associated text segment in col. 3 line 66 to col. 4 line 3. Rivette depicts this search in fig. 46. A search will obviously generate a report to display the results to the user after the search has completed. Rivette does not teach displaying the resulting of the search next to an associated graphic element related to the user selected descriptive naming-term. Krause does teach displaying text next to an associated graphic element related to a user selected naming-term. Krause teaches in col. 5 lines 14-18 that a user may select, using a mouse or keyboard, a hotspot or naming-term to display an associated segment of textual description. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Rivette with the teaching of Krause so that the result of the search would have displayed next to the associated graphic element related to the user selected descriptive naming-term. It would have been obvious and desirable to have done this so that the text and graphic element could have been viewed simultaneously.)

Regarding dependent claim 11, Rivette teaches:

*The method of document management of claim 7 further comprising:
e) employing a user interface for allowing a user to input a user selected graphic element naming-term to invoke said search and link processing module for searching within said single processor-recognizable file incorporating said single document for said user-selected graphic element and for linking said user selected graphic element naming-term to an associated segment of textual description that including and describing said user-selected graphic naming-term and for displaying said associated segment of textual description and a column or page number, and a line-range number in said single document for said associated segment of textual description immediately and directly next to a graphic element marked with said user-selected graphic element naming-term.*

(See, Rivette, teaching a user interface for searching and linking and also displaying the location of a found text in col. 3 lines 49-51, col. 3 line 66 through col. 4 line 3, and in col. 4 lines 24-34. Rivette depicts this search in fig. 35 and 36, fig. 46, and col. 29 line 65 – col. 30 line 20. A search will obviously generate a report to display the results to the user after the search has completed. Rivette is used for viewing patents and is fully aware of column number, page number, and line-range information of textual segments and can provide this information to the user. Rivette does not teach displaying the resulting of the search next to an associated graphic element related to the user selected naming-term. Krause does teach displaying text next to an associated graphic element related to a user selected naming-term. Krause teaches in col. 5 lines 14-18

that a user may select, using a mouse or keyboard, a hotspot or naming-term to display an associated segment of textual description. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Rivette with the teaching of Krause so that the result of the search would have displayed next to the associated graphic element related to the user selected naming-term. It would have been obvious and desirable to have done this so that the text and graphic element could have been viewed simultaneously.)

Regarding dependent claim 12, Rivette teaches:

The method of document management of claim 7 further comprising:

- e) employing a user interface for allowing a user to input a user-selected naming-term to invoke said search and link processing module for searching within said single processor-recognizable file incorporating said single document for said user-selected naming-term and for linking said user-selected naming-term to an associated segment of textual description including and describing said user-selected naming-term designated by an alpha-numeral designation linking to an associated graphic element; and*
- f) displaying at least a drawing and said associated graphic element including said user-selected naming-term immediately and directly next to said associated graphic element.*

(See, Rivette, teaching a user interface for searching and linking a naming-term to associated text in col. 3 lines 49-51, col. 3 line 66 through col. 4 line 3, and col. 4 lines 24-34. Rivette also teaches a display for drawing a graphic element, its associated text, linked naming-term and said term's location in col. 2 lines 42-50 and col. 16 lines 7-24. Rivette does not teach displaying an alpha-numeral designation and descriptive naming term next to an associated graphic element. Krause does teach displaying a name, label, and text immediately next to an associated graphic element related to a user selected naming-term. Krause teaches in col. 5 lines 14-18 that a user may select, using a mouse or keyboard, a hotspot or naming-term to display an associated segment of textual description. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Rivette with the teaching of Krause so that the name, label, and text segment would have been displayed next to the associated graphic element related to the user selected naming-term. It would have been obvious and desirable to have done this so that the text and graphic element could have been viewed simultaneously.)

Regarding independent claim 13, Rivette teaches:

A naming-term based and graphically aided document review and management system implemented in a computer for reading a single document having textual descriptions and at least a drawing consisted of graphic elements designated with graphic element designations associated with a descriptive naming term included and described in said

textual description in said single document incorporated in a single processor-recognizable file, comprising:
a display processing module for displaying said drawing with said naming term as designated by said alpha-numeral designation and described in said at least one associated segment of said textual description wherein said naming term is displayed immediately and directly next to said graphic element whereby a document reviewer can directly and simultaneously view and associate said descriptive naming term as described in said textual description to said graphic element without requiring a processor to process multiple files.

(See, Rivette, teaching a document reading means for reading a document having textual descriptions and at least a drawing having at least a graphic element assigned with an alpha-numeral designation, wherein said document reading means is further provided for converting said graphic element with said alphanumerical-designation and said textual descriptions to a plurality of processor-recognized elements in fig. 9 and 10. Fig. 9 demonstrates how the documents arrive in electronic format from the Patent and Trademark Office and then in fig. 10 displays the process of converting the documents into process-recognized elements.

Rivette also teaches a search and link means for searching said processor-recognized elements and linking alpha-numeral designations with at least one associated segment of textual description including the alpha-numeral designation wherein the alpha-numeral designation linked to a descriptive naming term in the

document in fig. 35 and 36, col. 3 lines 28-51, and col. 29 line 65 – col. 30 line 20.

Rivette describes how the text and image files are synchronized to produce Equivalent Files. The files are the equivalent of the elements and synchronized is the equivalent of linking in the claimed invention. Applicant's specification in page 3 lines 6-9 further discloses that products for searching and linking text to graphic elements are commonly available in the market.

Rivette teaches the display of both graphics and associated text including the column and line numbers of said text on the screen immediately next to one another in both fig. 33, col. 3 line 66 to col. 4 line 5, and col. 4 lines 19-24. Fig. 33 shows and col. 4 lines 19-24 explains a patent image window immediately next to a window of associated text. What Rivette does not teach is each descriptive naming-term displayed immediately and directly next to the graphic elements and the alpha-numeral designation assigned to each graphic element whereby a user can select an alpha-numeral designation or a descriptive naming term to display of the associated segment of textual description associated with said alpha-numeral designation or descriptive naming term.

Krause teaches each naming-term displayed immediately and directly next to the graphic elements in fig. 3-5 and col. 5 lines 7-18. See specifically Krause, Figure 5, showing a descriptive naming term, such as "building paper", for example, displayed immediately and directly next to said graphic element. The graphic elements and the text labels and text descriptions are all readily available to the user on one screen. Krause teaches in col. 5 lines 7-13 that both a name and label are placed upon the

graphic at each of a plurality of hotspots. Furthermore, Krause teaches in fig. 3b that each hotspot has unique coordinates to uniquely identify each hotspot and consequently each graphic element identified by each hotspot is likewise uniquely identified by individual coordinates related to the location of the hotspot. Krause teaches in col. 5 lines 14-18 that a user may select, using a mouse or keyboard, said hotspot to display an associated segment of textual description. Krause teaches that the hotspots annotate a primary document and link to a textual description in a secondary document. These documents could be document parts for example in a hierarchical compound document and thus the textual description invoked by the hotspot could be part of the same document as the graphical document containing the hotspot. Additionally Krause teaches that the descriptive naming term may be described in at least one associated segment of a textual description also displayed immediately and directly next to said graphic element (See Krause, Figure 6, showing descriptive naming term "1/A34" displayed with textual description "Soffit Section" immediately and directly next to a graphic element of a soffit section).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Rivette with Krause and teachings of Applicant's disclosure to have created the claimed invention. One of ordinary skill in the art would have taken the text of Rivette and used it to replace the numbered labels on the images, as is done in Krause, through the use of automatic link generation systems and techniques which Applicant's specification teaches were readily available in the market.

It would have been obvious and desirable to make this modification such that the combined image and text information would have been easier to read.

While Rivette does not teach expressly that the textual descriptions include describing said descriptive naming term designated by said alpha-numeral designation, Krause teaches textual descriptions included in a secondary document that describes said descriptive naming term, such as describing the descriptive naming term which is designated by said alpha numeral designation "A" (See Krause, Figure 5, element 65). Furthermore, it would have been obvious to do so, providing the benefit of allowing the user to obtain additional information with regard to the descriptive naming term that may not be conveniently displayed on the initial display screen.

As disclosed, a "naming term" is the element name which is identified by number in a patent drawing. See, disclosure, figure 4B, and page 8, lines 2-4 and 15-17. There are two specifications to the term "naming term" as used in the claims. Using claim 1 as an exemplar of the independent claims, the first use of "naming term" is within the specification of the search and link means for associating a "alpha-numeral designation" with "textual descriptions" "wherein said alpha-numeral designation designating a descriptive naming term illustrated by said graphic element. See, claim 1. The first specification does not require search by the descriptive naming term. A naming term is merely what is designated by the alpha-numeral that is searched for. The first specification is expressly taught in Rivette, figure 36, element 502, and col. 29, line 65 through col. 30, line 29, teaching the element number search.

The second specification for a "naming term" is found in claim 1 in the last section which specifies a display means "for displaying said drawing with said descriptive naming term displayed immediately next to said graphic element illustrated with said alpha-numeral designation assigned to said graphic element whereby a document reviewer can directly and graphically view and associate said graphic element together with said descriptive naming term." See Claim 1. This limitation is read by the Examiner as having been intended by the Applicant to mean that a graphic element, for example a bolt in the drawing of a mechanical device, is displayed next to the element number, for example "12," along with the "naming element," such as "bolt 12" with "bolt 12" appearing on the drawing rather than the usual designation of just "12."

It is noted that in the example immediately above, "bolt" is the same thing as "12." Displaying one or the other in association with a graphic fully identifies the graphic. Associating both the name "bolt" and the number "12" in association with the graphic is more informative, but essentially duplicative. This relationship is noted in support of the conclusion that it would have been obvious to one of ordinary skill in the art at the time of the invention to identify a graphic by either the name or the number or both. The motivation for using both is for convenience is not having to look up the name associated with the number, or the number associated with the name. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the invention of Rivette, according to the teachings of Krause to display both a name and a number for a graphic item, as is specified in claim 13.)

While Rivette and Krause do not teach expressly incorporating the textual descriptions and the number of processor-recognized elements in a single processor-recognizable file, it was well known in the art at the time of the invention that various data may be combined into a single processor-recognizable file. At the time of the invention it would have been obvious to one of ordinary skill in the art to include the textual descriptions and processor-recognizable elements of Rivette and Krause in a single file without changing the respective function of the references and yielding the predictable result of storing both the textual descriptions and the processor-recognizable elements. Furthermore, it would have been obvious to do so, providing the benefit of allowing the textual descriptions to be stored with the processor-recognizable elements, thus making future updates more easily manageable by allowing the developer to access only a single file requiring updates rather than multiple files.

Regarding dependent claim 14, Rivette teaches:

*The document review and management system of claim 13 wherein:
said display processing module is further provided for displaying a column
or page number, and a line-range number in said single document along
with said segment of textual description immediately and directly next to
said naming term displayed immediately next to said graphic element in
the drawing.*

(See, Rivette, teaching a document-location-finder from a search in col. 4 lines 24-34 and a column and line coordinates described in col. 16 lines 7-24. Rivette also teaches a display means for displaying the text which contains the original column and line information described in col. 2 lines 42-50. Rivette does not teach displaying this information next to the alpha-numeral-designation, descriptive naming term, and associated graphic element. Krause teaches displaying associated text immediately and directly next to a graphic element identified by an alpha-number-designation and descriptive naming term in fig. 3-5 and col. 5 lines 7-18. Krause teaches in col. 5 lines 14-18 that a user may select, using a mouse or keyboard, said hotspot to display an associated segment of textual description. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Rivette with Krause such that it displays the location information of the text in the same manner as the claimed invention. Rivette is used for viewing patents and is fully aware of column number, page number, and line-range information of textual segments and can provide this information to the user. This information would have been displayed immediately next to the appropriate graphic element using the teaching of Krause.

Regarding dependent claim 15, Rivette teaches:

*The document review and management system implemented in a computer of claim 13 further comprising:
a user interface provided for allowing a user to input a user- selected naming-term for searching within said single processor-recognizable file*

for said user-selected descriptive naming term and for linking said user-selected naming-term to an associated segment of textual description including and describing said user-selected naming term and a figure number of an associated graphic element linked by said user-selected naming term described in said textual descriptions for displaying said associated segment of textual description together with said figure number of said associate graphic element included in said drawing.

(See, Rivette, teaching a graphical user interface in col. 3 lines 49-51 and a text search within a single document in col. 4 lines 24-34. Rivette depicts this search in fig. 46. A search will obviously generate a report to display the results to the user after the search has completed. Rivette shows the results of a search in fig. 35, 36 and col. 29 line 65 – col. 30 line 20. Rivette does not teach displaying the resulting of the search next to an associated graphic element related to the user selected naming-term. Krause does teach displaying text within a single document immediately next to an associated graphic element related to a user selected descriptive naming-term. Krause teaches in col. 5 lines 14-18 that a user may select, using a mouse or keyboard, a hotspot or naming-term to display an associated segment of textual description. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Rivette with the teaching of Krause so that the result of the search would have displayed next to the associated graphic element related to the user selected descriptive naming-term. It would have been obvious and desirable to have done this so that the text and graphic element could have been viewed simultaneously.)

Regarding dependent claim 16, Rivette teaches:

The document review and management system implemented in a computer of claim 13 further comprising:
a user interface provided for allowing a user to input a user- selected naming-term for searching within said single processor-recognizable file for said user-selected descriptive naming term and for linking said user-selected naming-term to an associated segment of textual description including and describing said user-selected naming term and an associated graphic element related to said user-selected naming-term for displaying said user-selected naming-term together with said associated segment of textual description immediately and directly next to said associated graphic element in said drawing.

(See, Rivette, teaching a user interface in col. 3 lines 49-51 and search and link in col. 4 lines 24-34. Rivette teaches the display of a graphic element linked with an associated text segment in col. 3 line 66 to col. 4 line 3. Rivette depicts this search in fig. 46. A search will obviously generate a report to display the results to the user after the search has completed. Rivette shows the results of a search in fig. 35, 36 and col. 29 line 65 – col. 30 line 20. Rivette does not teach displaying the resulting of the search next to an associated graphic element related to the user selected descriptive naming-term. Krause does teach displaying text within a single document immediately and directly next to an associated graphic element related to a user selected descriptive

naming-term. Krause teaches in col. 5 lines 14-18 that a user may select, using a mouse or keyboard, a hotspot or descriptive naming-term to display an associated segment of textual description. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Rivette with the teaching of Krause so that the result of the search would have displayed next to the associated graphic element related to the user selected naming-term. It would have been obvious and desirable to have done this so that the text and graphic element could have been viewed simultaneously.)

Regarding dependent claim 17, Rivette teaches:

The document review and management system implemented in a computer of claim 13 further comprising:

a user interface provided for allowing a user to input a user- selected naming-term for searching within said single processor-recognizable file for said user-selected descriptive naming term and for linking said user-selected naming-term to an associated segment of textual description including and describing said user-selected term and for displaying said user-selected naming term together with said drawing and said associated segment of textual description with a column or page number, and a line-range number in said single document for said associated segment of textual description in said single document.

(See, Rivette, teaching a user interface for searching and linking and also displaying the location of a found text in col. 3 lines 49-51, col. 3 line 66 through col. 4 line 3, and in col. 4 lines 24-34. Rivette depicts this search in fig. 46. A search will obviously generate a report to display the results to the user after the search has completed. Rivette is used for viewing patents and is fully aware of column number, page number, and line-range information of textual segments and can provide this information to the user. Rivette does not teach displaying the resulting of the search next to an associated graphic element related to the user selected naming-term. Krause does teach displaying text from a single document next to an associated graphic element related to a user selected naming-term. Krause teaches in col. 5 lines 14-18 that a user may select, using a mouse or keyboard, a hotspot or naming-term to display an associated segment of textual description. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Rivette with the teaching of Krause so that the result of the search would have displayed next to the associated graphic element related to the user selected naming-term. It would have been obvious and desirable to have done this so that the text and graphic element could have been viewed simultaneously.)

Regarding dependent claim 18, Rivette teaches:

The document and review management system implemented in a computer of claim 14 further comprising:

a user interface provided for allowing a user to input a user-selected naming-term for searching within said single processor-recognizable file for said user-selected descriptive naming term and for linking said user-selected naming-term to an associated segment of textual description including and describing said user-selected descriptive naming term and an associated graphic element in said drawing related to said user-selected naming-term; and

said display processing module is further provided for displaying a drawing showing said associated graphic element with said associated segment of textual description and said column or page number, and said line-range number in said single document for said associated segment of textual description displayed immediately next to said graphic element.

(See, Rivette, teaching a user interface for searching and linking a naming-term to associated text in col. 3 lines 49-51, col. 3 line 66 through col. 4 line 3, and col. 4 lines 24-34. Rivette also teaches a display for drawing a graphic element, its associated text, linked naming-term and said term's location in col. 2 lines 42-50 and col. 16 lines 7-24. Rivette does not teach displaying an alpha-numeral designation and descriptive naming term next to an associated graphic element. Krause does teach displaying a name, label, and text from a single document next to an associated graphic element related to a user selected naming-term. Krause teaches in col. 5 lines 14-18 that a user may select, using a mouse or keyboard, a hotspot or naming-term to display an associated segment of textual description. It would have been obvious to one of ordinary skill in the

art at the time the invention was made to have modified Rivette with the teaching of Krause so that the name, label, and text segment would have been displayed next to the associated graphic element related to the user selected naming-term. It would have been obvious and desirable to have done this so that the text and graphic element could have been viewed simultaneously.)

Regarding independent claim 19, Rivette teaches:

A method for reading and managing a single document having textual descriptions and at least a drawing consisted of graphic elements designated with an graphic element designation associated with a descriptive naming term included and described in one of said textual descriptions of said single document incorporated in a single processor-recognizable file, comprising:

employing a display processing module for displaying said drawing with said descriptive naming term included in said textual description displayed said naming term described in said textual descriptions to said graphic elements whereby a document reviewer can directly and simultaneously view and associate said descriptive naming term to said graphic element without requiring a processor to process multiple files.

(See, Rivette, teaching a document reading means for reading a document having textual descriptions and at least a drawing having at least a graphic element assigned with an alpha-numeral designation, wherein said document reading means is further

provided for converting said graphic element with said alphanumerical-designation and said textual descriptions to a plurality of processor-recognized elements in fig. 9 and 10. Fig. 9 demonstrates how the documents arrive in electronic format from the Patent and Trademark Office and then in fig. 10 displays the process of converting the documents into process-recognized elements.

Rivette also teaches a search and link means for searching said processor-recognized elements and linking alpha-numeral designations with at least one associated segment of textual description including the alpha-numeral designation wherein the alpha-numeral designation linked to a descriptive naming term in the document in fig. 35 and 36, col. 3 lines 28-51, and col. 29 line 65 – col. 30 line 20. Rivette describes how the text and image files are synchronized to produce Equivalent Files. The files are the equivalent of the elements and synchronized is the equivalent of linking in the claimed invention. Applicant's specification in page 3 lines 6-9 further discloses that products for searching and linking text to graphic elements are commonly available in the market.

Rivette teaches the display of both graphics and associated text including the column and line numbers of said text on the screen immediately next to one another in both fig. 33, col. 3 line 66 to col. 4 line 5, and col. 4 lines 19-24. Fig. 33 shows and col. 4 lines 19-24 explains a patent image window immediately next to a window of associated text. What Rivette does not teach is each naming-term displayed immediately next to the graphic elements and the alpha-numeral designation assigned to each graphic element whereby a user can select an alpha-numeral designation or a

descriptive naming term to display of the associated segment of textual description associated with said alpha-numeral designation or descriptive naming term.

Krause teaches each naming-term displayed immediately and directly next to the graphic elements in fig. 3-5 and col. 5 lines 7-18. See specifically Krause, Figure 5, showing a naming term, such as "building paper", for example, displayed immediately and directly next to said graphic element. The graphic elements and the text labels and text descriptions are all readily available to the user on one screen. Krause teaches in col. 5 lines 7-13 that both a name and label are placed upon the graphic at each of a plurality of hotspots. Furthermore, Krause teaches in fig. 3b that each hotspot has unique coordinates to uniquely identify each hotspot and consequently each graphic element identified by each hotspot is likewise uniquely identified by individual coordinates related to the location of the hotspot. Krause teaches in col. 5 lines 14-18 that a user may select, using a mouse or keyboard, said hotspot to display an associated segment of textual description. Krause teaches that the hotspots annotate a primary document and link to a textual description in a secondary document. These documents could be document parts for example in a hierarchical compound document and thus the textual description invoked by the hotspot could be part of the same document as the graphical document containing the hotspot. Additionally Krause teaches that the descriptive naming term may be described in at least one associated segment of a textual description also displayed immediately and directly next to said graphic element (See Krause, Figure 6, showing naming term "1/A34" displayed with

textual description "Soffit Section" immediately and directly next to a graphic element of a soffit section).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Rivette with Krause and teachings of Applicant's disclosure to have created the claimed invention. One of ordinary skill in the art would have taken the text of Rivette and used it to replace the numbered labels on the images, as is done in Krause, through the use of automatic link generation systems and techniques which Applicant's specification teaches were readily available in the market. It would have been obvious and desirable to make this modification such that the combined image and text information would have been easier to read.

While Rivette does not teach expressly that the textual descriptions include describing said descriptive naming term designated by said alpha-numeral designation, Krause teaches textual descriptions included in a secondary document that describes said descriptive naming term, such as describing the descriptive naming term which is designated by said alpha numeral designation "A" (See Krause, Figure 5, element 65). Furthermore, it would have been obvious to do so, providing the benefit of allowing the user to obtain additional information with regard to the descriptive naming term that may not be conveniently displayed on the initial display screen.

As disclosed, a "naming term" is the element name which is identified by number in a patent drawing. See, disclosure, figure 4B, and page 8, lines 2-4 and 15-17. There are two specifications to the term "naming term" as used in the claims. Using claim 1 as an exemplar of the independent claims, the first use of "naming term" is within the

specification of the search and link means for associating a "alpha-numeral designation" with "textual descriptions" "wherein said alpha-numeral designation designating a naming term illustrated by said graphic element. See, claim 1. The first specification does not require search by the naming term. A naming term is merely what is designated by the alpha-numeral that is searched for. The first specification is expressly taught in Rivette, figure 36, element 502, and col. 29, line 65 through col. 30, line 29, teaching the element number search.

The second specification for a "naming term" is found in claim 1 in the last section which specifies a display means "for displaying said drawing with said naming term displayed immediately next to said graphic element illustrated with said alpha-numeral designation assigned to said graphic element whereby a document reviewer can directly and graphically view and associate said graphic element together with said descriptive naming term." See Claim 1. This limitation is read by the Examiner as having been intended by the Applicant to mean that a graphic element, for example a bolt in the drawing of a mechanical device, is displayed next to the element number, for example "12," along with the "naming element," such as "bolt 12" with "bolt 12" appearing on the drawing rather than the usual designation of just "12."

It is noted that in the example immediately above, "bolt" is the same thing as "12." Displaying one or the other in association with a graphic fully identifies the graphic. Associating both the name "bolt" and the number "12" in association with the graphic is more informative, but essentially duplicative. This relationship is noted in support of the conclusion that it would have been obvious to one of ordinary skill in the

art at the time of the invention to identify a graphic by either the name or the number or both. The motivation for using both is for convenience is not having to look up the name associated with the number, or the number associated with the name. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the invention of Rivette, according to the teachings of Krause to display both a name and a number for a graphic item, as is specified in claim 19.)

While Rivette and Krause do not teach expressly incorporating the textual descriptions and the number of processor-recognized elements in a single processor-recognizable file, it was well known in the art at the time of the invention that various data may be combined into a single processor-recognizable file. At the time of the invention it would have been obvious to one of ordinary skill in the art to include the textual descriptions and processor-recognizable elements of Rivette and Krause in a single file without changing the respective function of the references and yielding the predictable result of storing both the textual descriptions and the processor-recognizable elements. Furthermore, it would have been obvious to do so, providing the benefit of allowing the textual descriptions to be stored with the processor-recognizable elements, thus making future updates more easily manageable by allowing the developer to access only a single file requiring updates rather than multiple files.

Regarding dependent claim 20, Rivette teaches:

The method of claim 19 wherein:

said step of displaying said drawing further comprising a step of displaying an associated segment of textual description including descriptions of said descriptive naming term for said designated graphic element immediately and directly next to said graphic elements an associated segment of textual description including descriptions of said naming term described in said textual descriptions.

(See, Rivette, teaching a display for drawing a graphic element, its associated text, and said text's location in col. 2 lines 42-50, col. 3 line 66 through col. 4 line 3, and col. 16 lines 7-24. Rivette does not teach displaying an alpha-numeral designation and descriptive naming term immediately next to an associated graphic element. Krause does teach displaying a name, label, and text from a single document next to an associated graphic element related to a user selected naming-term. Krause teaches in col. 5 lines 14-18 that a user may select, using a mouse or keyboard, a hotspot or naming-term to display an associated segment of textual description. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Rivette with the teaching of Krause so that the name, label, and text segment would have been displayed next to the associated graphic element related to the user selected descriptive naming-term. It would have been obvious and desirable to have done this so that the text and graphic element could have been viewed simultaneously.)

Regarding dependent claim 21, Rivette teaches:

*The method of claim 19 further comprising:
employing a user interface for allowing a user to input a user- selected
naming-term for searching within said single processor-recognizable file
and for linking said user-selected descriptive naming-term to an
associated segment of textual description including descriptions of said
user-selected descriptive naming term and for linking to an associated
graphic element related to said user-selected naming term for displaying a
drawing together with said associated segment of textual description said
user-selected descriptive naming term immediately and directly next to
said graphic element.*

(See, Rivette, teaching a graphical user interface in col. 3 lines 49-51 and a text search in col. 4 lines 24-34. Rivette depicts this search in fig. 46. A search will obviously generate a report to display the results to the user after the search has completed. Rivette does not teach displaying the resulting of the search immediately next to an associated graphic element related to the user selected naming-term. Krause does teach displaying text from a single document immediately next to an associated graphic element related to a user selected descriptive naming-term. Krause teaches in col. 5 lines 14-18 that a user may select, using a mouse or keyboard, a hotspot or descriptive naming-term to display an associated segment of textual description. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Rivette with the teaching of Krause so that the result of the search would

have displayed next to the associated graphic element related to the user selected naming-term. It would have been obvious and desirable to have done this so that the text and graphic element could have been viewed simultaneously.)

6. It is noted that any citations to specific, pages, columns, lines, or figures in the prior art references and any interpretation of the references should not be considered to be limiting in any way. A reference is relevant for all it contains and may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art. See, MPEP 2123.

Response to Arguments

7. Applicants' arguments filed 5 April 2010 have been fully considered, but they are not persuasive.

Applicant argues that Rivette in combination with Krause fails to teach or reasonably suggest *“any of the naming terms assigned by an unique alpha-numeral designation (both in the textual descriptions and to the graphic element), next to the graphic element(s)”*, as amended in the Request for Continued Examination filed on 5 April 2010. As noted in the rejection under 35 U.S.C. 112, first paragraph, the newly added material constitutes new matter which is not supported by the instant specification, however, in the interest of furthering prosecution, the Office will respond to the Applicant's assertion that the amended limitations are not taught or reasonably suggested by Rivette in combination with Krause. The Office respectfully disagrees. Krause clearly teaches a unique alpha-numeral designation of a graphic element contained within a document in several portions of the Krause disclosure. As previously discussed in past Office actions, an example of a unique alpha-numeral designation of a graphic element designating a naming term taught by Krause is shown in Krause, Figure 5, showing the naming term “Soffit Vent Detail” immediately adjacent the drawing or image of said soffit vent. The Office maintains that the naming term assigned by an alpha-numeral designation of “soffit vent detail” is an element name provided for a given drawing which can reasonably suggest to one of ordinary skill in the art to be applied to the textual descriptions within a patent document of Rivette as described in the rejection of claims 1, 7, 13, and 19 listed above.

On page 17 of the Request for Continued Examination filed on 5 April 2010, Applicant as noted a response to the Examiner's points as recited in the Office action

"mailed on November 3, 2090" For the purpose of clarification, the Office assumes that the Applicant is responding to the Office action mailed on 3 November 2009, not 3 November 2090.

Applicant argues on page 17 that the term "Soffit Section" in Krause, Figures 5 and 6 is merely "comprehensively understandable by the reader of the graphic element" and therefore is NOT a naming term. The Office respectfully disagrees and turns to Applicant's own disclosure for the description of a "naming term".

Applicant's disclosure describes a "naming term" as the element name which is identified by number in a patent drawing (See Instant Specification, Figure 4B, and Page 8, lines 2-4 and 15-17). Using claim 1 as an exemplar of the independent claims, the first use of "naming term" is within the specification of the search and link means for associating a "alpha-numeral designation" with "textual descriptions" "wherein said alpha-numeral designation designating a descriptive naming term illustrated by said graphic element. See, instant claim 1. The first specification does not require search by the descriptive naming term. A descriptive naming term is merely what is designated by the alpha-numeral that is searched for. The first specification is expressly taught in Rivette, figure 36, element 502, and col. 29, line 65 through col. 30, line 29, teaching the element number search.

The second specification for a "naming term" is found in claim 1 in the last section which specifies a display means "for displaying said drawing with said descriptive naming term displayed immediately next to said graphic element illustrated

with said alpha-numeral designation assigned to said graphic element whereby a document reviewer can directly and graphically view and associate said graphic element together with said descriptive naming term." See, instant Claim 1. This limitation is read by the Examiner as having been intended by the Applicant to mean that a graphic element, for example a bolt in the drawing of a mechanical device, is displayed next to the element number, for example "12," along with the "naming element," such as "bolt 12" with "bolt 12" appearing on the drawing rather than the usual designation of just "12."

It is noted that in the example immediately above, "bolt" is the same thing as "12." Displaying one or the other in association with a graphic fully identifies the graphic. Associating both the name "bolt" and the number "12" in association with the graphic is more informative, but essentially duplicative.

The Office respectfully disagrees with the Applicant's assertion that Rivette in combination with Krause fails to teach or reasonably suggest a naming term. The Office maintains that the alpha-numeral designations of both Rivette and Krause, as described in Rivette, Figures 35 and 36, and Column 29, lines 65-67 and Column 30, lines 1-20, and in Krause, Figures 4 and 5, element 65, showing naming term "A", which ARE naming terms as they may be reasonably interpreted by one of ordinary skill in the art based upon Applicant's disclosure.

Applicant argues on Page 18 that the examples cited in the Office action filed 3 November 2009 ARE NOT naming terms. Applicant notes that said examples, which

include the naming terms "Fixed Base Clip" and "SOFFIT SECTION" as taught by Krause, are not naming terms because:

A) they have not been described in the textual descriptions.

B) they have not been designated by alpha-numeral designation in the textual description

C) they have not been designated by alpha-numeral designation as a graphic element in the drawings shown in Figures 5 and 6

D) they cannot provide a link between the textual descriptions and the graphic element due to the fact that the graphic elements "Fixed Base Clip" or "SOFFIT SECTION" as shown in Figures 5 and 6 have not been designated by a unique alpha-numeral designation and thus there is not way to link these graphic elements to relevant textual descriptions that describe a graphic element associated by the unique alpha-numeral designation.

The Office respectfully disagrees. As discussed above, Rivette in combination with Krause teaches naming terms as defined in Applicant's disclosure.

A) The naming terms as taught by Krause have been described in textual descriptions. The Office maintains the rejection as cited above, and as an additional example of a naming term described by a textual description, see Krause, Figure 4, naming term "A" described by a textual description including "Note: Area between cutter & edge of..." as shown in the textual description of naming term "A" in Krause, Figure 5.

B) Krause teaches naming terms that have been designated by alpha-numeral designation in the textual description. Using the example cited in item A above, Krause

teaches an alpha-numeral designation in the textual description of naming term "A", as shown in Figure 5, where the "note" describing "A" includes the alpha-numeral description, "A".

C) Krause teaches naming terms that have been designated by alpha-numeral designation. See the further example cited above in response to item B.

D) Krause teaches naming terms that CAN provide a link between the textual descriptions and the graphic element due to the fact that they have been designated by a unique alpha-numeral designation. Again, see the examples cited in response to items A and B above.

Applicant's arguments in section II, items 1 and 2, of Applicant's Response on pages 18-20 of the Request for Continued Examination filed on 5 April 2010 additionally relate to the issue of whether Rivette in combination with Krause teach or reasonably suggest a "naming term". This issue has been addressed above and the Office maintains the rejection of claims 1-21 as cited above and in the Office action filed 3 November 2009.

Applicant argues in item 3 on Pages 20-21 of the Request for Continued Examination filed on 5 April 2010 that Rivette in combination with Krause fails to teach or reasonably suggest a search and link process for searching within said single-processor recognizable file for linking said processor-recognized elements with said alpha-numeral designation with at least one associated segment of said textual

descriptions including and describing said naming term designated by said alpha-numeral designation illustrated by said graphic element. The Office respectfully disagrees. Krause teaches each descriptive naming-term displayed immediately and directly next to the graphic elements in fig. 3-5 and col. 5 lines 7-18. See specifically Krause, Figure 5, showing a descriptive naming term, such as "building paper", for example, displayed immediately and directly next to said graphic element. The graphic elements and the text labels and text descriptions are all readily available to the user on one screen. Krause teaches in col. 5 lines 7-13 that both a name and label are placed upon the graphic at each of a plurality of hotspots. Furthermore, Krause teaches in fig. 3b that each hotspot has unique coordinates to uniquely identify each hotspot and consequently each graphic element identified by each hotspot is likewise uniquely identified by individual coordinates related to the location of the hotspot. Krause teaches in col. 5 lines 14-18 that a user may select, using a mouse or keyboard, said hotspot to display an associated segment of textual description. Krause teaches that the hotspots annotate a primary document and link to a textual description in a secondary document. These documents could be document parts for example in a hierarchical compound document and thus the textual description invoked by the hotspot could be part of the same document as the graphical document containing the hotspot. Additionally Krause teaches that the descriptive naming term may be described in at least one associated segment of a textual description also displayed immediately and directly next to said graphic element (See Krause, Figure 6, showing descriptive naming term "1/A34" displayed with textual description "Soffit Section"

immediately and directly next to a graphic element of a soffit section). Applicant's arguments are again directed to the issue of whether Rivette in combination with Krause teach or reasonably suggest a "naming term". This issue has been addressed above and the Office maintains the rejection of claims 1-21 as cited above and in the Office action filed 3 November 2009.

In response to item 4 on Pages 21-22 of the Request for Continued Examination filed on 5 April 2010, applicant's argument that there is no teaching, suggestion, or motivation to combine the references, the examiner recognizes that obviousness may be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988), *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992), and *KSR International Co. v. Teleflex, Inc.*, 550 U.S. 398, 82 USPQ2d 1385 (2007). In this case, it would have been obvious to one of ordinary skill in the art to combine the text of Rivette with the numbered labels on the images of Krause through the use of automatic link generation systems and techniques which Applicant's specification teaches were readily available in the market at the time of the invention for the benefit of making the combined image and text easier to read and comprehend.

Applicant is advised to direct any further arguments with regard to the teaching of "naming terms" to the Board of Appeals and Interferences as the Office has concluded this issue to have been fully considered numerous times in the prosecution of the case.

Conclusion

8. All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no, however, event will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laurie Ries whose telephone number is 571-272-4095. The examiner can normally be reached on M-Th, 5:30am-4:00pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doug Hutton can be reached on 571-272-4137. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Laurie Ries/
Primary Examiner
Technology Center 2100
1 June 2010

